

5 WHAT IS CLAIMED IS:

1. A fluid dispensing device comprising
a hollow housing comprising one or more walls;
an orifice arranged to pass through a wall of the housing;
a reservoir that fits into the hollow interior of the housing;
10 a pump that fits into the reservoir and includes a nozzle that contacts the
orifice; and
an actuating mechanism that contacts the pump;
wherein a force applied to a portion of the actuating mechanism in a first
direction causes the actuating mechanism to move the pump in a second direction, and
15 causing it to expel fluid from the reservoir through the nozzle and out of the device
through the orifice.
2. The device of claim 1, wherein the housing comprises a lower shell and an
upper shell connected to the lower shell to enclose a hollow interior.
- 20 3. The device of claim 1, further comprising a dispensing button arranged in a
wall of the housing to contact a portion of the actuating mechanism.
4. The device of claim 1, wherein the actuating mechanism comprises one or
25 more front arms that contact the pump via a pressure plate secured to the pump, and
one or more rear arms that rest against the housing.
5. The device of claim 4, wherein the one or more rear arms rest against a
recess in, or protrusion extending from, a wall of the housing.
- 30 6. The device of claim 5, wherein the protrusion extends from a bottom wall
of the housing.
7. The device of claim 1, wherein the pump and the reservoir move together
35 as one unit.

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8. The device of claim 1, wherein the actuating mechanism comprises a body having a front portion and a rear portion connected by a hinge, wherein the front portion comprises a first cutout and two front arms, one front arm being located on each side of the first cutout, configured to fit over the pump, and wherein the rear
10 portion comprises a second cutout and two rear arms, one rear arm being located on each side of the second cutout, configured to fit over the pump.

9. The device of claim 8, wherein the actuating mechanism further comprises a tab attached to the rear portion that extends through a third cutout in the front
15 portion when the actuating mechanism is bent at the hinge.

10. The device of claim 8, wherein the actuating mechanism is made of plastic, and the hinge is a living hinge.

20 11. The device of claim 1, wherein the actuating mechanism comprises two elongated parts, each part comprising a front arm, a rear arm, and hinge connecting the two arms, and wherein the two elongated parts are arranged one on each side of the pump.

25 12. The device of claim 11, wherein the two elongated parts are attached to each other by a connecting bar.

13. The device of claim 11, wherein the parts are made of plastic, and the hinge is a living hinge.

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14. The device of claim 1, wherein the reservoir comprises two fluid chambers arranged one on each side of the pump chamber, and being in fluid communication with each other and the pump chamber.

35 15. The device of claim 1, wherein the pump comprises a body, a nozzle, and a spring within the body to press the nozzle out of the pump when pressed into the

5 body by an external force, wherein the body, nozzle, and spring are aligned along one central axis.

16. The device of claim 1, further comprising an orifice cup configured to fit into the orifice, for controlling the dispensing pattern of the fluid as it is expelled from the nozzle.

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17. The device of claim 16, wherein the dispensing pattern is a spray, stream, or drop of fluid.

18. The device of claim 1, wherein the reservoir comprises at least one fluid
15 chamber and a pump chamber, and the pump fits into the pump chamber.

19. The fluid dispensing device of claim 1, wherein the actuating mechanism comprises one or more actuating arms having an angled face; the device further comprises a pump mount connected to the pump and having a wedge surface that is
20 arranged to contact the angled face of the actuating arm; and wherein pressure on a portion of the actuating mechanism in a first direction causes the one or more actuating arms to move, causing the angled face to press against the wedge surface, causing the wedge surface and the pump to move in a second direction, and causing the pump to expel fluid from the reservoir through the nozzle and out of the device
25 through the orifice.

20. The device of claim 1, wherein the first and second directions are at approximately 80 to 100 degrees to each other.

30 21. The device of claim 1, wherein the first and second directions are at approximately 90 degrees to each other.

22. A case for a fluid dispensing device of claim 1, comprising
a container configured to enclose the dispensing device, and
35 a cover configured to allow the dispensing device to be inserted into and removed from the container.

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23. The case of claim 22, wherein the cover further comprises a portion that covers a dispensing button of the dispensing device.

24. The case of claim 22, wherein the case has a round, square, or rectangular profile.

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25. The case of claim 22, wherein the case has the shape of an animal, a flower, a heart, or a face.

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26. A method of dispensing a fluid, the method comprising obtaining a device of claim 1; and applying a force to a portion of the actuating mechanism to expel one measured dose of fluid in the device.

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27. The method of claim 26, wherein applying a force to a portion of the actuating mechanism comprises applying a downward force on a hinged actuation mechanism that converts the downward force into a force in a second direction within the dispensing device, and causes the pump to move and to expel fluid through the nozzle and out of the device through the orifice.

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28. The method of claim 26, wherein the first and second directions are at approximately 80 to 100 degrees to each other.

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29. The method of claim 26, wherein the first and second directions are at approximately 90 degrees to each other.

30. The method of claim 26, wherein the fluid is perfume, water, mouthwash, deodorant, antiperspirant, cologne, pepper spray, or skin lotion.